

## PATENT

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- a cylindrical distributor housing with its cylinder axis arranged horizontally and transverse to the web of pulp,
- an inlet for the cellulose pulp in the distributor housing,
- a rotating feed screw with its axis of rotation parallel to the cylinder axis of the distributor housing and designed to feed pulp from the inlet and along the entire length of the distributor housing in the direction of its cylinder axis, and
- outlets arranged substantially along a generatrix in the jacket surface of the distributor housing,

characterized in that the outlets consist of holes arranged along the generatrix in the jacket surface of the distributor housing, with a defined hole diameter (d), and where the holes are arranged at a distance (x) from each other.

2. (Previously cancelled) Distributor device according to Claim 1, characterized in that the distance (x) exceeds the hole diameter (d).

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3. (Previously cancelled) Distributor device according to Claim 1 or 2, characterized in that the hole diameter lies in the range of 20 to 60 mm, preferably with hole diameters of  $40 \pm 5$  mm.

4. (Previously cancelled) Distributor device according to Claim 3, characterized in that the hole diameter increases continuously as seen from the inlet of the distributor housing.

5. (Previously cancelled) Distributor device according to Claim 3, characterized in that the holes are distributed evenly across the entire width of the pulp web formed from the distributor device.

6. (Previously cancelled) Distributor device according to Claims 2 to 5, characterized in that the distance between the holes lies in the range of 40 to 90 mm, preferably at a distance of  $75 \pm 5$  mm, and where the distance is at least 150% of the hole diameter.

7. (Previously cancelled) Distributor device according to Claim 1 or 3, characterized in that the holes are arranged in the lowest part of the jacket surface of the distributor housing

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directed substantially straight down from the distributor housing about a position corresponding to 6 o'clock, and within an area of rotation in the range of  $\pm 45$  degrees.

8. (Previously cancelled) Distributor device according to Claim 1 or 3, characterized in that the feed screw (4a, 4b) has a screw thread (15) whose crests, during operation, sweep across the holes at a predefined distance (Y) from the holes (7) in the inner jacket surface of the distributor housing, which distance lies in the range of 5 to 20 mm, preferably  $10 \pm 2$  mm.

9. (Previously cancelled) Distributor device according to any of the preceding claims, characterized in that the feed screw (4a, 4b) has a core (14) with a diameter increasing continuously from the inlet (6a, 6b), and the annular gap around the feed screw, in which the pulp is conveyed, decreases continuously as seen from the inlet of the distributor housing.

10. (Previously cancelled) Distributor device according to Claim 6 or 7, characterized in that the feed screw (4a, 4b) has a decreasing thread pitch on its screw blade (15).

11. (Currently amended) A distributor device for cellulose pulp having a consistency range of 2 to 12%, the

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distributor device being used to form a ~~uniform pulp web~~ pulp layer running from the distributor device in an apparatus treating the cellulose pulp, comprising:  
a cylindrical distributor housing having a cylinder axis arranged horizontally and transverse to the pulp layer web;

the distributor housing having an inlet defined therein for the cellulose pulp;

a rotating feed screw having an axis of rotation parallel to the cylinder axis of the distributor housing being designed to feed pulp from the inlet and along an entire length of the distributor housing in a direction of its cylinder axis; and

the distributor housing having outlets defined therein and arranged substantially along a generatrix in a jacket surface of the distributor housing, the outlets having holes arranged along the generatrix in the jacket surface of the distributor housing, the holes having a hole-diameter (d) and being arranged at a distance (x) from each other wherein all holes are located below the axis of rotation of the rotating feed screw.

12. (Original) The distributor device according to claim 11 wherein the distance (x) exceeds the hole-diameter (d).

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13. (Currently amended) A distributor device for cellulose pulp having a consistency range of 2 to 12%, the distributor device being used to form a layer of pulp running from the distributor device in an apparatus treating the cellulose pulp, comprising:

a cylindrical distributor housing having a cylinder axis arranged horizontally and transverse to the pulp layer;

the distributor housing having an inlet defined therein for the cellulose pulp;

a rotating feed screw having an axis of rotation parallel to the cylinder axis of the distributor housing being designed to feed pulp from the inlet and along an entire length of the distributor housing in a direction of its cylinder axis;

and

the distributor housing having outlets defined therein and arranged substantially along a generatrix in a jacket surface of the distributor housing, the outlets having holes arranged along the generatrix in the jacket surface of the distributor housing, the holes having a hole-diameter (d) and being arranged at a distance (x) from each other, ~~The distributor device according to claim 11~~ wherein the hole-diameter (d) is in the range of 20 millimeters to 60 millimeters, the hole-diameter (d) increases continuously from the inlet of the distributor housing.

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14. (Cancelled) ~~The distributor device according to claim 13 wherein the hole diameter (d) increases continuously from the inlet of the distributor housing.~~

15. (Currently amended) The distributor device according to claim 13 wherein the holes are distributed evenly across the entire width of the pulp web layer formed from the distributor device.

-16- (Original) The distributor device according to claim 12 wherein the distance (x) is between 40 millimeters and 90 millimeters and the distance (x) is at least 150% of the hole-diameter (d).

17. (Currently amended) The distributor device according to claim 11 wherein the holes are arranged in a lowest part of the jacket surface of the distributor housing directed substantially straight down from the distributor housing and within an area of rotation in a range of 45 degrees in a first direction and 45 degrees in a second opposite direction ~~± 45 degrees~~.

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18. (Original) The distributor device according to claim 11 wherein a feed-screw has a screw thread with crests being sweepable across the holes at a predefined distance (y) from the holes in the jacket surface of the distributor housing, the distance (y) is in a range of 5 millimeter to 20 millimeters.

19. (Original) The distributor device according to claim 18 wherein the feed screw has a core with a diameter increasing continuously from the inlet and an annular gap around the feed screw, into which the pulp is conveyed, decreases continuously from the inlet of the distributor housing.

20. (Original) The distributor device according to Claim 18 wherein the feed-screw has a decreasing thread pitch on a screw blade.

21. (Original) The distributor device according to claim 11 wherein the hole-diameter (d) is in the range of 35 millimeters to 45 millimeters.

22. (Original) The distributor device according to claim 12 wherein the distance (x) is between 40 millimeters and 90 millimeters and the distance (x) is at least 150% of the hole-diameter (d).